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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/028,133      | 12/20/2001  | Charles E. Brugger   | 82187NAB            | 2430             |

7590 01/08/2007  
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EXAMINER

WORKU, NEGUSSIE

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2625

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 01/08/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|                              |                 |                |  |
|------------------------------|-----------------|----------------|--|
| <b>Office Action Summary</b> | Application No. | Applicant(s)   |  |
|                              | 10/028,133      | BRUGGER ET AL. |  |
|                              | Examiner        | Art Unit       |  |
|                              | Negussie Worku  | 2625           |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

DOUGLAS Q. TRAN  
PRIMARY EXAMINER

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

1. This Office action is in response to the election of the restriction requirement filed on 11/03/06, in which, claims 1-21 are pending and claims 22-42 are cancelled.

Further, in view of applicant's arguments/remarks filed 8/22/06, with respect to the rejection(s) of claim(s) 1-21, have been fully considered and are persuasive, and therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the Office action discussed below.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima et al. (USP 5,532,841) in view of koyanagi et al. (USP 5,424,844).

With regard to claim 1, Nakajima et al. teaches a scanning system (100 of fig 1) supporting platen (100a flatbed type scanner) and sheet-fed scanning (100b, ADF image type scanner of fig 1) of documents comprising:

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a first scanning unit (image reading unit 100a of fig 1) with a first enclosure housing a first set of mechanisms for sheet-fed, (ADF type image reading 100c and 100a of fig 1), double-sided scanning functions, (ADF type image scanner has a function of double sided scanning) said first scanning unit (100a of fig 1) further comprising a connection to a computer (control unit 301 of fig 1); and

a second scanning unit (100b of fig 1) with a second enclosure, attached to said first scanning unit (100a of fig 1) through a first tether interface, and including a second set of mechanisms for single-sided platen scanning of documents (glass type scanner 100a of fig 1) wherein: and said first and second scanning units are physically separated (ADF scanning unit 10b,c and flatbed scanning unit 100a of fig 1, are physically separated, as shown in fig 1) . But Nakajima et al. does not teach or disclose

wherein said first tether interface provides for power from said first scanning unit to said second scanning unit; said first tether interface transmits digital information between

Koyanagi et al. in the same area of connecting image scanner to the host computer and to other different devices, teaches wherein said first tether interface provides for power from said first scanning unit to said second scanning unit, (as shown in fig 2, scanner 11 of fig 2, connected to scanner 11, via interface 12 of fig 2); said first tether interface (interface cable 12 of fig 1) transmits digital information between said first (21 of fig 3, and second scanning unit 11 of fig 3), transmit power as well as data information from the scanner to the computer 13 of fig 3, col. 5, 20-30).

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Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Nakajima to include: first tether interface provides for power from said first scanning unit to said second scanning unit; said first tether interface transmits digital information between said first and second scanning units.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging device of Nakajima by the teaching of Koyanagi, for the purpose of having a flexible connectivity between various devices, such as plurality of scanner or printer and computer, in order easily exchange data between plurality of devices by facilitating a network image data sharing environment.

With respect to claim 2, Nakajima et al. discloses the scanning system (as shown in fig 1) wherein a plurality of digital scanning devices (scanning device 100a-100c of fig 1), are attached to said first scanning unit (100a of fig 2) through said tether interface (interface 164 of fig 6).

With respect to claim 3, Nakajima et al. discloses the scanning system (as shown in fig 1 ) wherein a plurality of digital scanning devices (scanning device 100a-100c of fig 1) are attached to said first scanning unit (100a of fig 2) through said tether interface (interface 164 of fig 6), for scanning checks or tickets (scanning document) in combination with the first scanning unit (100a of fig 2).

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With respect to claim 4, Nakajima et al. discloses the scanning system (as shown in fig 1 ) wherein a plurality of digital scanning devices (scanning device 100a-100c of fig 1), comprise at least one digital camera (CCD 151 of fig 2) for capturing digital photographs (photoelectric converter 151 of fig 5).

With respect to claim 5, Nakajima et al. discloses the scanning system (fig 1) wherein a unit control (controller 150 of fig 6) and image processing electronics (signal processor 152 of fig 6) contained in said first scanning unit (scanner 100 of fig 5) handle data control and camera movement, (co1.5, lines 35-40) for both said first scanning unit and said second scanning unit, (co1.6, line 53-56).

With respect to claim 6, Nakajima et al. discloses the scanning system (fig 1), wherein said first scanning unit (100 of fig 5) and said second scanning unit share a common host address (main control unit 300 of fig 1).

With respect to claim 7, Nakajima et al. discloses the scanning system (fig 1), wherein a third scanning unit (image reading unit 100c of fig 1) with a third enclosure are attached to said first scanning unit (100a of fig 1 ) through said tether interface (controller 150 is provided with. interface circuit 164 for external equipments, (col.6, lines 60-65).

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With respect to claim 8, Nakajima et al. discloses the scanning system (fig 1 ), wherein said tether interface is an electronic cable, (interface circuit 164 for external equipments, (col.6, lines 60-65).

With respect to claim 9 Nakajima et al. discloses the scanning system (fig 1 ), wherein said tether interface is a radio frequency link (154 of fig 5, col.6, lines 40-45).

With respect to claim 10, Nakajima et al. discloses the scanning system (fig 1), wherein said tether interface is a fiber optic cable (interface circuit 164 for external equipments, (co1.6, lines 60-65).

With respect to claim 11, Nakajima et al. discloses the scanning system (fig 1), wherein said tether interface is an infrared link (interface circuit 164 for external equipments, col.6, lines 60-65).

With respect to claim 12, Nakajima et al. discloses the scanning system (fig 1 wherein said first set of mechanisms (102a, 102b, 104 of fig 2) of said first scanning unit (image reading unit 100a of fig 1 ) comprise: a feeder opening (cover 107 to be open to feed the document for scanning) through which paper documents are fed into said first scanning unit (100a of fig 2); an exit opening (cover 107 of fig 2) adapted to output scanned documents from said first scanning unit (100a of fig 1); a paper pathway

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extending from said feeder opening to said exit opening (tray 118 of fig 3, for receiving document from feeder opening); and a first image-forming subsystem (image forming 100a of fig 2), disposed within said first scanning unit for scanning images appearing on documents fed through said feeder opening (tray 100a of fig 2).

With respect to claim 13, Nakajima et al. discloses the scanning system (fig 1) wherein said tether interface is a radio frequency link (154 of fig 5, col.6, lines 40-45).

With respect to claim 10, Nakajima et al. discloses the scanning system (fig 1), wherein said tether interface is a fiber optic cable (interface circuit 164 for external equipments, (col.6, and lines 60-65).

With respect to claim 11, Nakajima et al. discloses the scanning system (fig 1), wherein said tether interface is an infrared link (interface circuit 164 external equipments, col.6, lines 60-65).

With respect to claim 12, Nakajima et al. discloses the scanning system (fig 1 ), wherein said first set of mechanisms (102a, 102b, 104 of fig 2) of said first scanning (image reading unit 100a of fig 1 ) comprise: a feeder opening (cover 107 to be open to feed the document for scanning) through which paper documents are fed into said first scanning unit (100a of fig 2); an exit opening (cover 107 of fig 2) adapted to output scanned documents from said first scanning unit (100a of fig 1); a paper pathway



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extending from said feeder opening to said exit opening (tray 118 of fig 3, for receiving document from feeder opening); and a first image-forming subsystem (image forming 100a of fig 2), disposed within said first scanning unit for scanning images appearing documents fed through said feeder opening (tray 100a of fig 2).

With respect to claim 13, Nakajima et al. discloses the scanning system (fig 1) said feeder opening (platen cover 107); reflection means (mirror 103b, 103c of fig 2) disposed for guiding reflected light from said paper documents to said lens (104 of fig 2); and a camera (CCD sensor 151 of fig 2) for capturing an image of said reflective light.

With respect to claim 18, Nakajima et al. discloses the scanning system (fig 1), wherein said reflection means (mirror 103b and 103c of fig 2) comprises mirrors.

With respect to claim 19, Nakajima et al. discloses the scanning system (fig 1), wherein said second enclosure of said second scanning unit (100a of fig 2) further comprises a substantially flat upper surface (platen 106 of fig 2).

With respect to claim 20, Nakajima et al. discloses the scanning system (fig 1) wherein said second enclosure further comprising a glass top (platen 106 of fig 2) fixed to said upper surface and providing a platform upon which documents can be placed (platen cover 107 of fig 2).

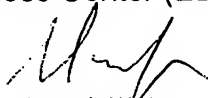
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With respect to claim 21, Nakajima et al. discloses the scanning system (fig 1), further comprising: a lid (document cover 107 of fig 2) for covering documents placed on said glass top (platen 106 of fig 2); and a hinging means coupling one end of said lid, (co1.7, lines 55-57).

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Negussie Worku whose telephone number is 571-272-7472. The examiner can normally be reached on 9am-6pm.

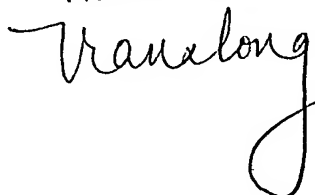
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on 571-272-7471. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Negussie Worku

12/27/06

DOUGLAS Q. TRAN  
PRIMARY EXAMINER



|                                   |                                       |  |  |             |
|-----------------------------------|---------------------------------------|--|--|-------------|
| <b>Notice of References Cited</b> | Application/Control No.<br>10/028,133 |  | Applicant(s)/Patent Under<br>Reexamination<br>BRUGGER ET-AL. |             |
|                                   | Examiner<br>Negussie Worku            |  | Art Unit<br>2625   | Page 1 of 1 |

**U.S. PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Name                 | Classification |
|---|---|--|-----------------|----------------------|----------------|
| * | A | US-5,532,841                                     | 07-1996         | Nakajima et al.      | 358/408        |
| * | B | US-6,628,433                                     | 09-2003         | Westcott et al.      | 358/474        |
| * | C | US-6,587,233                                     | 07-2003         | Salgado, David L.    | 358/505        |
| * | D | US-6,330,082                                     | 12-2001         | Oliver, Thomas C.    | 358/473        |
| * | E | US-4,734,760                                     | 03-1988         | Futaki, Kenji        | 358/514        |
| * | F | US-4,485,409                                     | 11-1984         | Schumacher, Peter M. | 358/479        |
| * | G | US-6,122,684                                     | 09-2000         | Sakura, Masayuki     | 710/73         |
| * | H | US-5,929,435                                     | 07-1999         | Han, Loi             | 250/234        |
| * | I | US-2002/0008758                                  | 01-2002         | Broemmelsiek et al.  | 348/143        |
| * | J | US-5,424,844                                     | 06-1995         | Koyanagi et al.      | 358/296        |
|   | K | US-  |                 |                      |                |
|   | L | US-  |                 |                      |                |
|   | M | US-  |                 |                      |                |

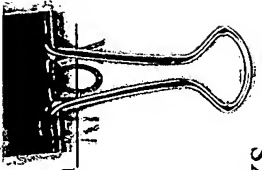
**FOREIGN PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Country | Name | Classification |
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|   | R |  |                 |         |      |                |
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|   | T |  |                 |         |      |                |

**NON-PATENT DOCUMENTS**

| * |   | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
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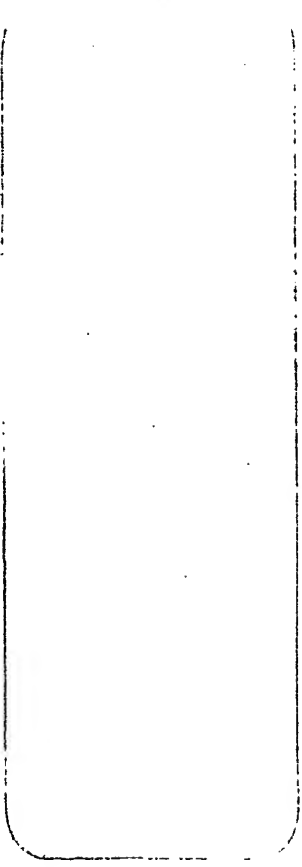
\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
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